

(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/046249 A1

(51) International Patent Classification⁷: H04N 9/31, H01S 5/068

(52) International Application Number: PCT/DK2004/000767

(53) International Filing Date: 5 November 2004 (05.11.2004)

(54) Filing Language: English

(55) Publication Language: English

(56) Priority Data: PA 2003 01652 6 November 2003 (06.11.2003) DK

(57) Applicant (for all designated States except US): MARTIN PROFESSIONAL A/S [DK/DK]; Olof Palmes Alle 18, DK-8200 Aarhus N (DK).

(58) Inventors; and

(59) Inventors/Applicants (for US only): GOOCH, Justin, Alexander [NO/NO]; Haugerudveien 12, NO-0674 Oslo (NO). ANDVIG, Christoffer [NO/NO]; Bygdøy Alle 65, NO-0265 Oslo (NO).

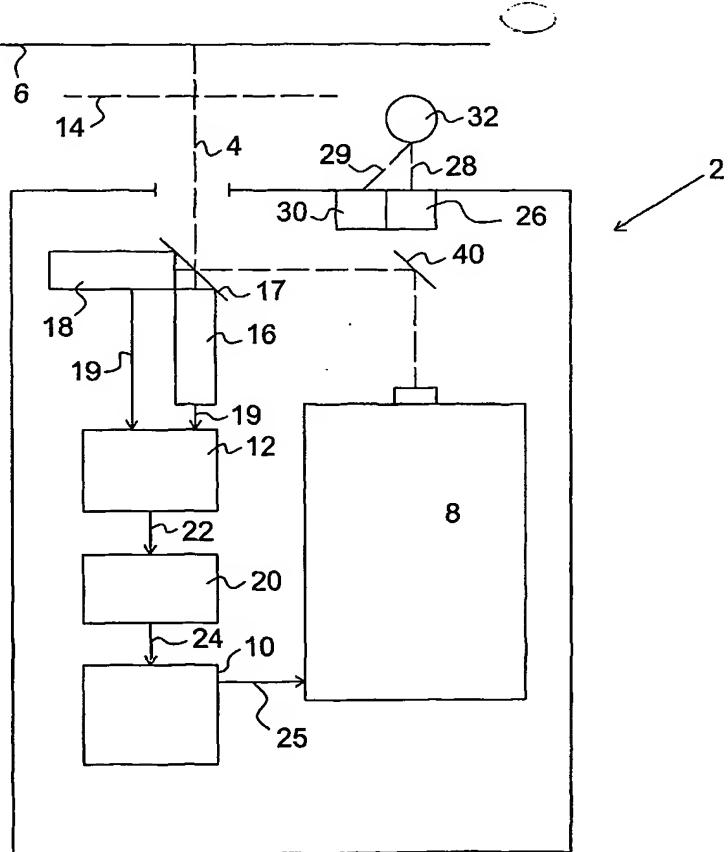
(60) Agent: PATRADE A/S; Fredens Torv 3A, DK-8000 Aarhus C (DK).

(61) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(62) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: SAFETY LASER DEVICE



(57) **Abstract:** The present invention relates to an apparatus and a method for projecting at least a first light beam onto a target, which apparatus comprises means for controlling the power of the light beam, which laser emits coherent radiation in the visible and the invisible light spectrum, which light beam is operated in a public room. The scope of this invention is to increase safety for people subjected to a light beam so people can be subjected to the light beam with no risk for eye or skin. This can be achieved with an apparatus and a method comprising detecting means for detecting the power content of the light beam, which apparatus also comprises means for reducing the light power, which means for reducing the light power is activated if the power content of the light beam increases to above a defined value. Light systems can be used in the entertainment industry, because the maximum power level of the light beam can be controlled into a security class for safety, e.g. class 3R. If the power level of the light beam is inside the level of the safety class, the light beam can hit people without the risk of damaging the body or eye or other medical indications, which might be physical or mental.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*